

What is claimed is:

1. A method of controlling or preventing involuntary movements such as caused by epileptic seizures, cerebral palsy, Parkinson's disease, spasticity, motor disorders and the like comprising:

applying a stimulation electrical signal to the vagus nerve to thereby prevent or control such movement

applying a neural conduction block to a vagus nerve of said patient at a blocking site with said neural conduction block selected to at least partially block nerve impulses on said vagus nerve at said blocking site.

2. A method according to claim 1 wherein said neural conduction block is applied to said nerve between a location of application of said stimulation electrical signal and an organ to be shielded from adverse effects of said stimulation electrical signal.

3. A method according to claim 1 wherein said neural conduction block is applied during application of said stimulation electrical signal.

4. A method according to claim 1 wherein application of said neural conduction block is variable by a controller to alter a characteristic of said block.

5. A method according to claim 1 wherein said neural conduction block is a cryogenic block

6. A method according to claim 1 wherein said neural conduction block is a pharmacologic block

7. A method according to claim 1 wherein said neural conduction block is an electrical conductive block

8. A method according to claim 1 further comprising determining that an involuntary movement is going to occur and thereafter applying said pulsed electrical signal to said vagus nerve.
9. An apparatus for controlling or preventing involuntary movements such as caused by epileptic seizures, cerebral palsy, Parkinson's disease, spasticity, motor disorders and the like comprising:
- a stimulation electrical signal generator capable of generating pulses having a frequency of approximately between 30 and 300 cycles per second with each pulse having a duration of between approximately 0.3 and 1 millisecond;
  - a positive electrode adapted to be applied to a person's body and means electrically connecting said electrode to said pulse generator;
  - a negative electrode adapted to be applied to a person's body adjacent the vagus nerve;
  - means for electrically connecting said electrode to said generator;
  - an electrically controllable neural conduction electrode adapted to be placed on a vagus nerve of said patient at a blocking site between a location of application of said stimulation electrical signal and an organ to be shielded from adverse effects of said stimulation electrical signal; and
  - a blocking signal generator for generating a blocking signal selected to at least partially block nerve impulses on said vagus nerve at said blocking site.
10. A method of controlling or preventing involuntary movements such as caused by epileptic seizures, cerebral palsy, Parkinson's disease, spasticity, motor disorders and the like comprising:
- determining that an involuntary movement is going to occur and thereafter applying a stimulation electrical signal to the vagus nerve as a point below the inferior cardiac nerve to thereby prevent or control such movement; and
  - applying a neural conduction block to a vagus nerve of said patient at a blocking site with said neural conduction block selected to at least partially block nerve impulses on said vagus nerve at said blocking site.

11. A method according to claim 10 wherein said neural conduction block is applied to said inferior cardiac nerve.

12. A method according to claim 10 wherein said neural conduction block is applied during application of said stimulation electrical signal.

13. A method according to claim 10 wherein application of said neural conduction block is variable by a controller to alter a characteristic of said block.

14. A method according to claim 10 wherein said neural conduction block is a cryogenic block.

15. A method according to claim 10 wherein said neural conduction block is a pharmacologic block.

16. A method according to claim 10 wherein said neural conduction block is an electrical conductive block.

17. A method of treating patients suffering from a movement disorder, which comprises the step of:

stimulating a patient's vagus nerve with an electrical pulse signal applied directly or indirectly thereto at a location in the immediate vicinity of the patient's diaphragm, including selectively programming electrical and timing parameters of said electrical pulse signal according to a predetermined therapy regimen for alleviating the disorder, and

applying a neural conduction block to said vagus nerve of said patient at a blocking site with said neural conduction block selected to at least partially block nerve impulses on said vagus nerve at said blocking site.

18. A method according to claim 17 wherein said neural conduction block is applied to said nerve between a location of application of said stimulation electrical signal and an organ to be shielded from adverse effects of said stimulation electrical signal.
19. A method according to claim 17 wherein said neural conduction block is applied during application of said stimulation electrical signal.
20. A method according to claim 1 wherein application of said neural conduction block is variable by a controller to alter a characteristic of said block.
21. A method according to claim 1 wherein said neural conduction block is a cryogenic block.
22. A method according to claim 1 wherein said neural conduction block is a pharmacologic block.
23. A method according to claim 1 wherein said neural conduction block is an electrical conductive block.
24. A method of treating patients suffering from involuntary movement disorders by stimulating a selected cranial nerve of the patient with an electrical signal applied to induce a signal up the nerve toward the brain from a location in the vicinity of the patient's diaphragm, including programming electrical and timing parameters of said electrical signal to ameliorate said disorder and programming electrical and timing parameters of a neural conduction block selected to at least partially block nerve impulses on said nerve at a blocking site.